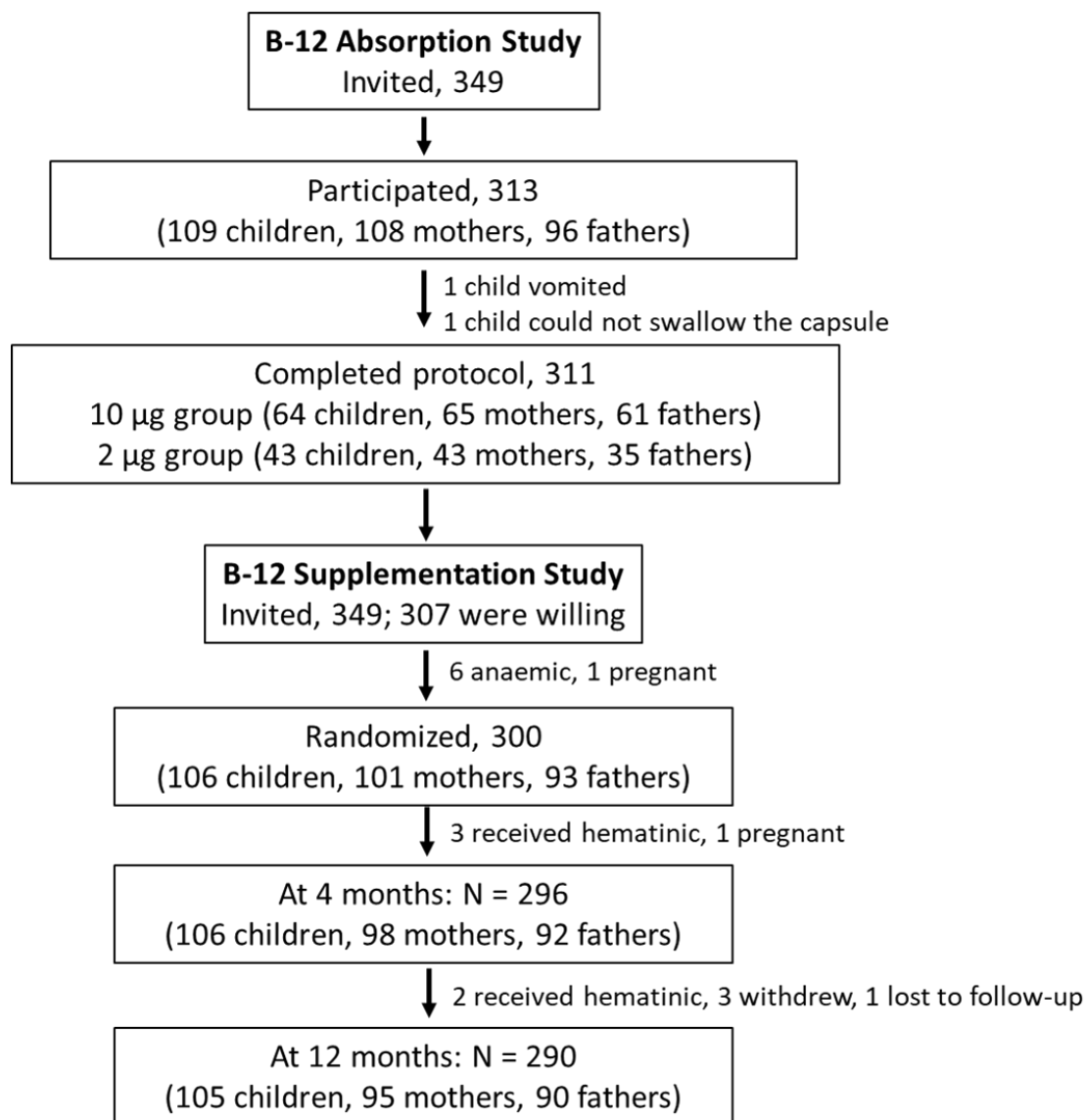
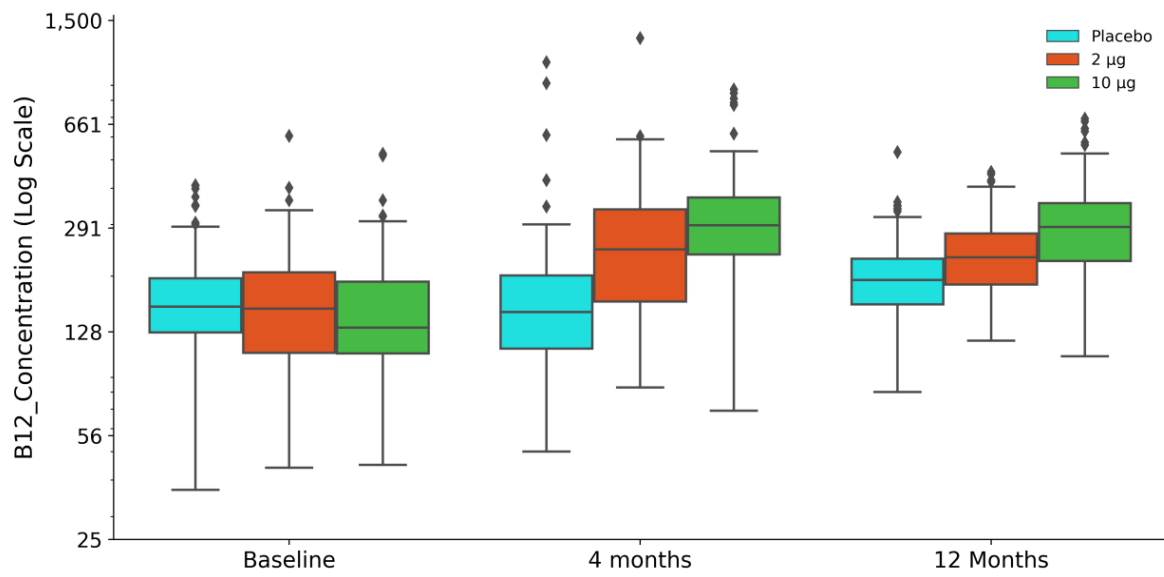




Supplementary Figure 1: Participant flow in the B-12 Absorption and Supplementation studies.



Supplementary Figure 2: B-12 Supplementation Study: Box plots of plasma B-12 at baseline, 4, and 12 months in the three B-12 supplemented groups (0, 2, and 10 µg B-12).

Supplementary Table 1: Absorption Study: Predictors of the rise in plasma holoTC concentration.

	Beta (S.E.)	<i>P</i>
Weight (kg)	-0.565 (0.060)	<0.0001
Sex: Female	-2.416 (2.070)	0.244
Baseline plasma holoTC (pmol/L)	0.098 (0.147)	0.507
B12 dose: 10µg (reference: 2µg)	19.881 (2.680)	<0.0001
R ²	0.464	

Supplementary Table 2. B-12 Supplementation Study: Plasma B12, folate, and homocysteine responses in the six groups after 4 and 12 months of intervention.

	B ₀ F ₀ <i>n</i> =48	B ₂ F ₀ <i>n</i> =46	B ₁₀ F ₀ <i>n</i> =47	B ₀ F ₂₀₀ <i>n</i> =52	B ₂ F ₂₀₀ <i>n</i> =47	B ₁₀ F ₂₀₀ <i>n</i> =51
Plasma B ₁₂ (pmol/L)						
Baseline	154 (127, 196)	150 (96, 205)	133 (100, 189)	159 (132, 200)	158 (109, 207)	130 (110, 201)
4 mo	155 (113, 195)	235 (148, 331) ***	298 (210, 455) ***	149 (112, 214)	259 (173, 340) ***	298 (245, 357) ***
12 mo	192 (159, 225) **	216 (184, 281) ***	293 (215, 364) ***	198 (160, 247) **	242 (196, 286) ***	297 (224, 338) ***
Plasma folate (nmol/L)						
Baseline	16.4 (12.5, 23.4)	15.6 (12.3, 20.2)	16.8 (13.3, 21.5)	15.7 (12.8, 20.1)	15.8 (12.6, 17.9)	17.2 (13.3, 22.9)
4 mo	15.5 (11.0, 19.5)	14.5 (10.7, 18.1) *	16.0 (11.4, 18.6) *	28.0 (21.1, 47.9) ***	31.4 (20.8, 45.7) ***	28.2 (21.4, 40.2) ***
12 mo	15.4 (10.2, 21.1)	13.3 (10.2, 16.2) ***	12.9 (10.5, 16.3) ***	28.2 (17.1, 38.8) ***	24.5 (17.1, 33.5) ***	24.8 (16.5, 31.1) ***
Plasma total homocysteine (μmol/L)						
Baseline	11.5 (8.8, 22.1)	14.5 (10.0, 21.3)	14.4 (10.2, 23.6)	11.5 (8.8, 17.7)	12.9 (9.6, 18.0)	13.2 (9.4, 18.8)
4 mo	13.6 (9.9, 23.6)	11.5 (8.0, 18.3) *	10.1 (8.3, 16.3) ***	11.4 (8.4, 17.0)	9.6 (7.3, 12.2) ***	9.2 (7.3, 14.0) ***
12 mo	13.8 (10.5, 23.0)	11.9 (8.8, 18.0) **	9.2 (7.5, 14.1) ***	13.6 (9.2, 16.8)	9.6 (8.0, 12.6) ***	9.3 (7.6, 12.4) ***
Compliance at 12 mo (%)	82	88	89	81	83	85

Median (25th, 75th percentiles) unless specified. * Difference from baseline concentration within groups by linear mixed models. **P* < 0.05, ***P* < 0.01, ****P* < 0.001. [The groups are: B₀F₀ = placebo, B₂F₀ = B-12 2 μg and folic acid 0, B₁₀F₀ = B-12 10 μg and folic acid 0, B₀F₂₀₀ = B-12 0 and folic acid 200 μg, B₂F₂₀₀ = B-12 2 μg and folic acid 200 μg, B₁₀F₂₀₀ = B-12 10 μg and folic acid 200 μg].